

City of Goodyear Water Quality Report 2008

Continuing Our Commitment to Water Quality to Our Customers South of I-10*

The City of Goodyear is once again proud to present its annual water quality report. This edition covers all testing completed from January 1 through December 31, 2008. We have dedicated ourselves to producing and providing quality drinking water that meets or exceeds all regulatory requirements for our customers south of I-10. We are pleased to inform you that our compliance with all state and federal drinking water regulations continues to remain exemplary.

We are continually striving to adopt new and innovative improvement methods for delivering the best quality drinking water to your tap in the most cost effective manner. As new challenges arise, we will remain vigilant in meeting the challenges of providing quality drinking water at an affordable price, of protecting source water, of conserving treated water, and of educating the community while continuing to serve the needs of all the water customers of the City of Goodyear.

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants.

The presence of these contaminants does not necessarily indicate that the water poses a health risk. The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it can acquire naturally occurring minerals, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.



**Goodyear residents north of I-10 receive Litchfield Park Service Company (LPSCo) water and will receive a separate Water Quality Report from LPSCo.*

2008 Water Sampling Results

PWS #07-094 Goodyear LPSCo

| Regulated Substances | Units | MCL | MCLG | Amount Detected | Low Range | High Range | Amount Detected | Low Range | High Range | Violation | Major Sources in Drinking Water |
|----------------------|--------------------|---------------------|---------|-----------------|-----------|------------|-----------------|-----------|------------|-----------|---|
| Alpha Emitters | pCi/L | 15 | 0 | 4.3+/-1.0 | 2.9+/-0.8 | 4.3+/-1.0 | 5.3+/-1.1 | 1.2+/-0.7 | 5.3+/-1.1 | no | Erosion of natural deposits |
| Arsenic ¹ | ppb | 10 | 0 | 4 | 1 | 7 | 8.9 | 2 | 17.7* | no | Erosion of natural deposits; orchards, glass and electronics production wastes runoff |
| Chlorine | ppm | mrdl=4 | mrdlg=4 | 0.36 | 0.04 | 1.02 | n/a | n/a | n/a | no | Water additive used to control microbes |
| Combined Radium | pCi/L | 5 | 0 | n/d | n/d | n/d | 1.5+/-0.2 | n/d | 1.5+/-0.2 | no | Erosion of natural deposits |
| Haloacetic Acid | ppb | 60 | n/a | 2.7 | 1 | 4.5 | 5 | n/d | 5.4 | no | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| Nitrate ² | ppm | 10 | 10 | 6.3 | 2.7 | 8.9 | 5.9 | 2.7 | 7.8 | no | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| Nitrite | ppm | 1 | 1 | n/a | n/a | n/a | n/d | n/d | n/d | no | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| Total Coliforms | % positive samples | 5% positive monthly | 0 | 0 | 0 | 0 | n/a | n/a | n/a | no | Naturally present in the environment |
| Trichloroethylene | ppb | 5 | 0 | 1 | 0.7 | 1.3 | n/a | n/a | n/a | no | Discharge from metal degreasing sites and other factories |
| TTHMs ³ | ppb | 80 | n/a | 17.6 | 2.9 | 42 | 18.8 | 9.8 | 23.2 | no | By-product of drinking water chlorination |
| Uranium | ppb | 30 | 0 | n/a | n/a | n/a | 4.4+/-0.9 | n/d | 4.4+/-0.9 | no | Erosion of natural deposits |

* LPSCo approved for arsenic exemption through January 2009.

Lead and Copper

Goodyear 2007

| Substance | Units | Action Level | MCLG | Amount Detected 90th Percentile | Homes Above Action Level | Violation | Typical Source |
|------------|-------|--------------|------|---------------------------------|--------------------------|-----------|--|
| Copper | ppm | 1.3 | 1.3 | 0.36 | 0 | no | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |
| Lead | ppb | 15 | 0 | 1.3 | 1 | no | Corrosion of household plumbing systems; erosion of natural deposits |
| LPSCo 2008 | | | | | | | |
| Copper | ppm | 1.3 | 1.3 | 0.188 | 0 | no | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |
| Lead | ppb | 15 | 0 | <2 | 0 | no | Corrosion of household plumbing systems; erosion of natural deposits |

Table Definitions

AL (Action Level):
The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

MCL (Maximum Contaminant Level):
The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG (Maximum Contaminant Level Goal):
The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MRDL (Maximum Residual Disinfectant Level):
The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant Level Goal):
The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

pCi/L (picocuries per liter):
A measure of radioactivity.

ppb (parts per billion):
One part substance per billion parts water (or micrograms per liter).

ppm (parts per million):
One part substance per million parts water (or milligrams per liter).

TTHM: trihalomethane

n/a: not applicable

n/d: not detected

Notes

¹
These arsenic values are effective January 23, 2007. Until then, the MCL is 50 ppb and there is no MCLG.

²
Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider.

³
Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of getting cancer.

Substances That May Be Present in Source Water

Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife.

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from industrial or domestic wastewater, farming, urban stormwater runoff, oil and gas production, or mining.

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and which may also come from gas stations, urban stormwater runoff, and septic systems.

Pesticides and Herbicides, which may come from urban stormwater runoff, agriculture, and residential uses.

Radioactive Contaminants, which can be naturally occurring or the result of oil and gas production and mining.

Note
A sample reporting violation occurred and was immediately corrected.

Lead and Copper

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Goodyear is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to two minutes before using water for drinking or cooking.

If you are concerned about lead in your drinking water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline, 800-426-4791 or at www.epa.gov/safewater/lead.



The Source of Your Drinking Water

The City of Goodyear's drinking water source is 100% groundwater. The City has production wells, storage facilities, and pressure booster stations. The underground aquifer from which the City receives its water is called the West Salt Valley Sub-Basin. The City of Goodyear also purchases groundwater from Litchfield Park Service Company (LPSCo), which draws from the same West Salt Valley Sub-Basin aquifer. The aquifer's depth ranges from 100 to 1,000 feet from the surface. With nine well sites (four of which include storage tanks) and five booster stations, the City of Goodyear's operating system has a storage capacity of 11.1 million gallons. To learn more about our watershed on the internet, go to the U.S. EPA's Surf Your Watershed at www.epa.gov/surf.

Important Health Information

Some people may be more vulnerable to substances in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers.

The U.S. EPA/CDC (United States Environmental Protection Agency Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 800-426-4791.

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer. While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic.

Fluoride in Drinking Water

This is an alert about your drinking water and a cosmetic dental problem that might affect children under nine years of age. At low concentrations, fluoride can help prevent cavities, but children drinking water containing more than 2 ppm of fluoride may develop cosmetic discoloration of their permanent teeth (dental fluorosis). Dental fluorosis, in its moderate or severe forms, may result in a brown staining and pitting of the permanent teeth. This problem occurs only in developing teeth, before they erupt from the gums.

Children under nine should be provided with alternative sources of drinking water or water that has been treated to remove the fluoride to avoid the possibility of staining and pitting of their permanent teeth, if consistently high levels of fluoride exist in your drinking water.

You may want to contact your dentist about proper use by young children of products containing fluoride. Older children and adults may safely drink the water.

Some home water treatment units are also available to remove fluoride from drinking water. To learn more about available home water treatment units, you may call NSF International at 877-8-NSF-HELP.

For more information about fluoride in drinking water, please call the City of Goodyear Environmental Compliance Supervisor, at 623-932-3010.

Contact Us

For more information about this report, or for any questions relating to your drinking water, please contact Linda Shapcott, Environmental Compliance Supervisor, at 623-932-3010.

Para la ayuda en español con este informe, por favor póngase en contacto con el departamento de la dirección de agua de la Ciudad de Goodyear, Ruben Veloz en 623-882-7511.

City of Goodyear
Public Works and Water Resources Department
P.O. Box 5100
Goodyear, AZ 85338

For more information about contaminants and health effects, call the U.S. EPA's Safe Drinking Water Hotline at 800-426-4791.